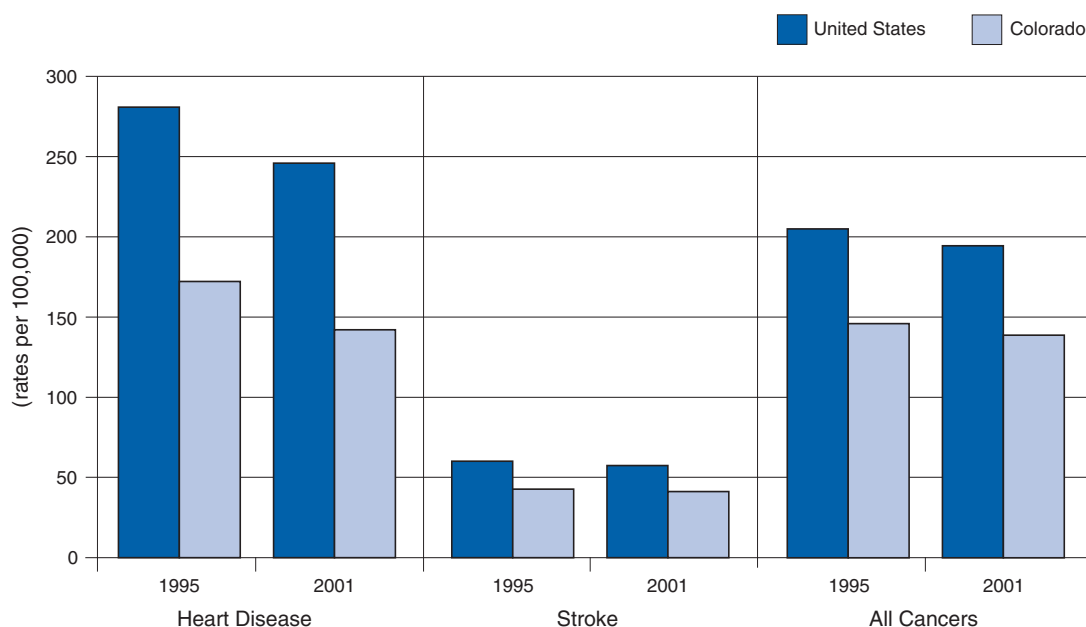


Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Colorado, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

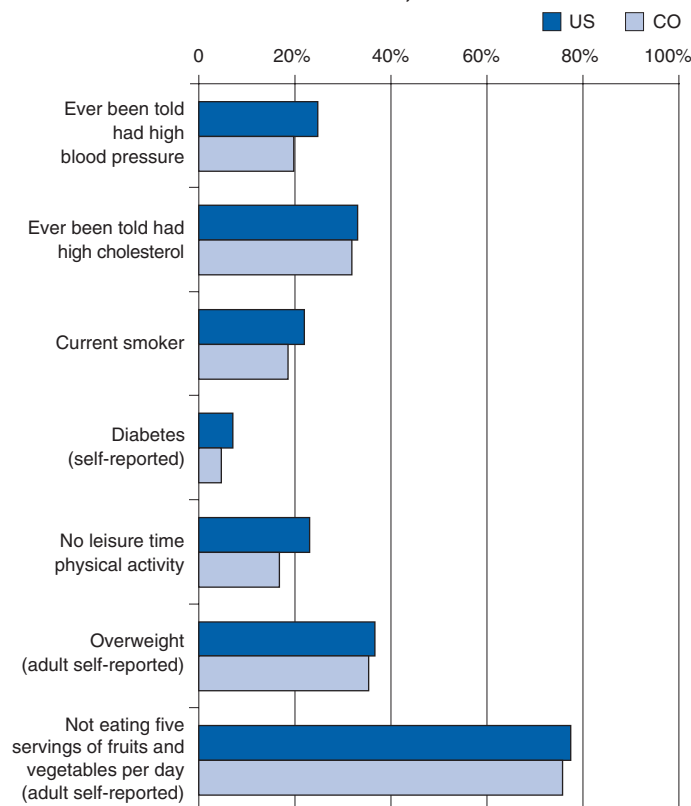
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Colorado, accounting for 6,293 deaths or approximately 22% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the fourth leading cause of death, accounting for 1,825 deaths or approximately 6% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 6,390 are expected in Colorado. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 15,510 new cases that are likely to be diagnosed in Colorado.

Estimated Cancer Deaths, 2004

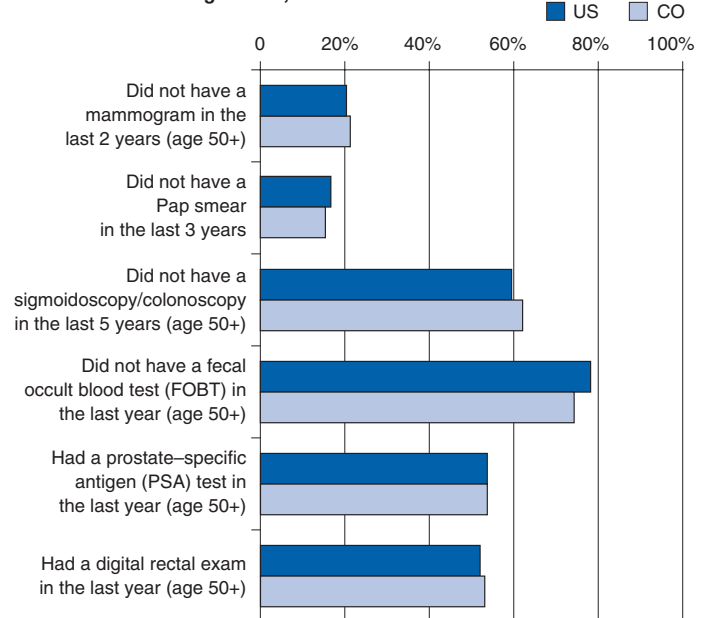
Cause of death	US	CO
All Cancers	563,700	6,390
Breast (female)	40,110	480
Colorectal	56,730	620
Lung and Bronchus	160,440	1,610
Prostate	29,900	330

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Colorado's Chronic Disease Program Accomplishments

Examples of Colorado's Prevention Successes

- Statistically significant decreases in cancer deaths among men and women across all races, with the greatest decrease occurring among Hispanic men (240.2 per 100,000 in 1990 versus 183.7 per 100,000 in 2000) and Hispanic women (133.2 per 100,000 in 1990 versus 119.1 per 100,000 in 2000).
- A 6.8% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years, from 28.1% in 1992 to 21.3% in 2002.
- A lower prevalence rate than the corresponding national rate for women older than age 18 who reported not having had a Pap smear in the last 3 years (15.4% in Colorado versus 16.7% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Colorado in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Colorado, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) <i>Colorado BRFSS</i>	\$228,488
National Program of Cancer Registries <i>Colorado Cancer Registry</i>	\$676,914
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program <i>Colorado Cardiovascular Coalition</i> <i>Cardiovascular Disease and Stroke Prevention Program</i> <i>Stroke Advisory Board</i> <i>Colorado Cardiovascular Health State Plan 2010</i>	\$298,102
Diabetes Control Program <i>Colorado Diabetes Prevention and Control Program</i> <i>Buddy System</i>	\$1,274,098
National Breast and Cervical Cancer Early Detection Program <i>Colorado Women's Cancer Control Initiative</i>	\$4,142,290
National Comprehensive Cancer Control Program <i>Colorado Comprehensive Cancer Prevention and Control Program</i>	\$711,246
WISEWOMAN	\$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program <i>Colorado State Tobacco Education and Prevention Partnership (STEPP)</i>	\$835,474
State Nutrition and Physical Activity/Obesity Prevention Program <i>Shape Up Across Colorado</i> <i>National Employee Health & Fitness Month</i> <i>Walk to School Colorado</i> <i>Colorado On The Move</i>	\$421,044
Racial and Ethnic Approaches to Community Health (REACH 2010)	\$0
Total	\$8,587,656

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Colorado that fall into other health areas. A listing of these programs can be found at <http://www.cdc.gov/nccdphp/states/index.htm>.

Opportunities for Success

Chronic Disease Highlight: Cardiovascular Disease

Although 2001 CDC mortality data indicate that Colorado had the 3rd lowest heart disease death rate in the nation and the 15th lowest stroke death rate, cardiovascular disease (CVD), including heart disease and stroke, was the leading cause of death in the state. From 1996 to 2000, Colorado had a heart disease death rate of 403 per 100,000, compared with the national average of 536 per 100,000. From 1991 to 1998, Colorado had a stroke death rate of 112 per 100,000, compared with the national average of 121 per 100,000. While the death rates in Colorado have been declining over the last 2 decades, the number of lives lost to CVD has increased due to Colorado's aging population.

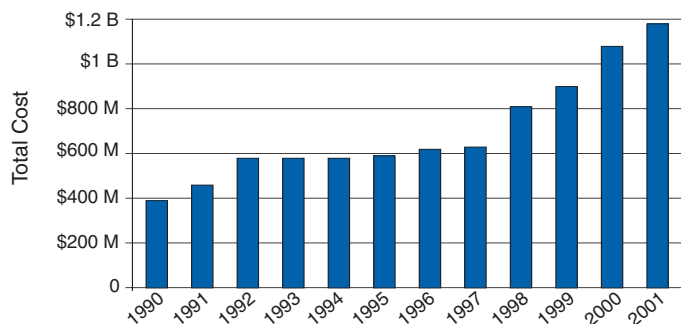
Each year between 1990 and 2001, there were more than 20,000 CVD hospitalizations for men and 17,000 CVD hospitalizations for women in Colorado. Hospitalizations increase with age, peaking for 65- to 74-year-olds.

In Colorado, the fiscal impact of CVD hospitalizations is high—and has been rising. The cost per hospitalization for CVD rose from about \$11,000 in 1990 to more than \$25,000 in 2001. The total cost of all hospitalizations for which CVD was the primary diagnosis was nearly \$400 million in 1990, and this cost rose to nearly \$1.2 billion by 2001 (see figure below).

The *Colorado Cardiovascular Health Program* seeks to decrease the mortality and morbidity of CVD. The program aims to reduce CVD risk factors such as high blood cholesterol, high blood pressure, obesity, and diabetes and strives to encourage physical activity, fruit and vegetable consumption, and the cessation of tobacco use.

Text adapted from *Colorado Cardiovascular Health State Plan 2010* (November 2002).

Total Cost* for All Hospital Discharges That Listed Major CVD as Primary Diagnosis: Colorado Residents, 1990-2001



*Not adjusted for inflation.

Source: Colorado Hospital Association, 2002

Disparities in Health

Nationally, the health disparities that exist within the African American, Hispanic, and American Indian/Alaska Native (AI/AN) populations, when compared with other racial/ethnic groups, are strikingly apparent in life expectancy, deaths from chronic diseases, and other measures of health status. Many factors contribute to health disparities within these three populations, such as socioeconomic factors, discrimination, cultural barriers, and the lack of access to health care.

In Colorado, these groups comprise 25% of the state's population. Although the state's data on health status indicate that overall, Colorado is a healthy state, African Americans, Hispanics, and AI/ANs are disproportionately affected by disease, injury, disability, and death. In contrast, whites and Asian/Pacific Islanders in Colorado have many positive health indicators.

From 1996 to 2000, Colorado's African Americans had a higher death rate from heart disease than whites (466 per 100,000 for African Americans versus 405 per 100,000 for whites). An examination of cancer data over a 5-year period during the 1990s indicate that African Americans had the lowest percentage of early detection for cancer (48.8%), compared with Hispanics (50.8%) and whites (57.6%).

Other Disparities

- **Life Expectancy:** In 1999, Colorado's African Americans had a life expectancy that was 5 fewer years than the life expectancy for whites (73.1 years versus 78.1 years).
- **Cancer Deaths:** In Colorado, from 1995 to 1999 incidence rates were statistically highest among whites, but death rates were statistically higher for African Americans. The death rate for African American men was 286.1 per 100,000 compared with 226.1 per 100,000 for white men. The death rate for African American women was 176.3 per 100,000 compared with 155.6 per 100,000 for white women.
- **Cervical Cancer:** The cervical cancer incidence rate among Colorado's Hispanic women (16.2 per 100,000) is more than twice as high as the rate for white women (7.4 per 100,000).
- **Diabetes:** In Colorado, the diabetes death rate for African Americans is more than twice that of whites (34.0 per 100,000 versus 16.0 per 100,000), but Hispanics have the highest diabetes death rate (35.9 per 100,000), which is almost 2.5 times the rate for whites. The death rate for AI/ANs (27.7 per 100,000) is approximately 1.7 times that of whites.

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For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42
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